

Claims

1. Device for covering profile material, comprising a roller conveyor (FR), whereon the profile material (P) is longitudinally guided, and pressure rollers (W1 - W6) which can be positioned, respectively, in relation to each other in a pressure position, such that a proportioned covering material (F) is pressed about the profile of the profile material (P) which is oriented transversal to or slightly on the conveying device, wherein single or several pressure rollers (W1 - W6) are arranged successively in groups in the direction of conveyance and are pressed, respectively, by means of a multi-axis positioning device (RA1, RA2), characterized in that the positioning device supports an automatically actuatable coupling, whereon the pressure roller (W1 - W6) is maintained in a defined, oriented manner, and magazine compartments (M1 - M6) are respectively arranged in a positioning area of the coupling (K1), wherein pressure rollers (W2 - W6), which are not necessary, are placed in a couplable manner.

2. Device according to claim 1, characterized in that the complementary couplings (K, K1) comprise centring means such as an inner and an outer cone or pyramid-shape,

angular orientation means such as a radial extension and a groove or edges, as well as axial limit stops.

3. Device according to claim 1 or 2, characterized in
5 that the coupling (K, K1) comprises radially actuatable locking pieces or latching mechanisms.

4. Device according to claim 3, characterized in that
the individual magazine compartments (M1 - M6),
10 respectively, support roller seats, which maintain coupling release devices (GL) cooperating with the locking pieces (L).

5. Device according to claim 4, characterized in that
15 the coupling release device is a divergent open fork, which encompasses the coupling (K1) tightly and, in the course of which, operates a button (L) or a lever to release the coupling.

20 6. Device according to claim 5, characterized in that the centring devices are perpendicular to an axis of a pressure roller, and that the fork (GL) is oriented radially to the couplings (K, K1).

7. Device according to claim 1, characterized in that the positioning devices (RA1, RA2) are robots (R1 -R16) turning in five or six degrees of freedom.

5 8. Device according to claim 7, characterized in that the robots (R1 - R16) are fixed next to or on the roller conveyor (FR).

9. Device according to claim 7, characterized in that
10 the robots (R1 - R16) can be positioned by means of servomotors and angle transmitters, and possess a driving-force regulation, the actual signal of which is produced respectively by a motor-current signal and/or a force-sensor signal.

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10. Device according to claim 9, characterized in that the force sensor is placed axially within the respective coupling (K).

20 11. Device according to claim 9, characterized in that the robots (R1 - R16) are connected to a master controller (ST) via a message bus (B), the master controller being linked to controlling and operating means (MO, TA), and comprising a memory (SP), which contains profile-related
25 positioning data and magazine-related pressure roller data.

12. Device according to claim 7, characterized in that
the robots (R1 - R16) comprise motors and/or transmissions,
which can be arrested by controllable brakes or are self-
5 locking, so that when idle, they keep their position.